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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/751,715	01/05/2004	Gary G. Churan	9301-81	2262
7590	05/31/2006		EXAMINER	
Mitchell S. Bigel Myers Bigel Sibley & Sajovec, P.A. P. O. Box 37428 Raleigh, NC 27627			TRAN, DALENA	
			ART UNIT	PAPER NUMBER
			3661	

DATE MAILED: 05/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/751,715	<b>Applicant(s)</b> CHURAN, GARY G.	
	<b>Examiner</b> Dalena Tran	<b>Art Unit</b> 3661	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE \_\_\_\_\_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 March 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8,10-15,17-43,45-49 and 51-69 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-8,10-15,17-20,36-43,45-49 and 51-54 is/are allowed.
- 6) ☒ Claim(s) 21,32-35,55 and 66-69 is/are rejected.
- 7) ☒ Claim(s) 22-31 and 56-65 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>3/3/06</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### **Notice to Applicant(s)**

1. This office action is responsive to the amendment filed on 3/15/06. As per request, claims 9, 16, 44, and 50 has been cancelled. Thus, claims 1-8, 10-15, 17-43, 45-49, and 51-69 are pending.

The prior art submitted on 3/3/06 has been considered.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 21, 32-35, 55, and 66-69, are rejected under 35 U.S.C.103(a) as being unpatentable over Watters et al. (6249245) in view of Richton et al. (6281837).

As per claim 21, Watters et al. disclose a mobile terminal comprising: a receiver that is configured to receive Global Positioning System (GPS) C/A signals from a plurality of GPS satellites (see column 15, lines 45-37; and columns 16-17, lines 40-30). Watters et al. do not disclose estimate Doppler shifts in the GPS C/A signals. However, Richton et al. disclose a processor that is configured to estimate Doppler shifts in the GPS C/A signals and to estimate received code phases of the GPS C/A signals using the Doppler shifts that are estimated (see columns 5-6, lines 23-10). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Watters et al. by combining estimate Doppler shifts in the GPS C/A signals for determining a position of an object.

Also, as per claim 32, Richton et al. discloses the receiver is further configured to receive from a wireless network a Doppler shift that is measured at the wireless network and a code phase that is measured at the wireless network and wherein the processor is further configured to estimate residual Doppler shifts in the GPS C/A signals due to mobile terminal motion using the Doppler shift and code phase that are measured at the wireless network and to estimate the received code phases of the GPS C/A signals using the Doppler shift that is estimated (see columns 6-7, lines 47-40).

As per claims 33-34, Richton et al. disclose the mobile terminal includes a GPS processor and a cellular data transceiver therein, and the mobile terminal includes a GPS processor and a cellular voice and data transceiver therein (see columns 7-8, lines 41-19; and columns 9-10, lines 23-13).

As per claim 35, Richton et al. disclose the mobile terminal includes a GPS processor, a terrestrial cellular voice and data transceiver and a satellite cellular voice and data transceiver therein (see columns 8-9, lines 20-21).

Claims 55, and 66-69 are method claims corresponding to system claims 21, and 32-35 above. Therefore, they are rejected for the same rationales set forth as above.

4. Claims 22-31, and 56-65 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 1-8, 10-15, 17-20, 36-43, 45-49, and 51-54 are allowable.

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**Remarks**

5. Applicant's argument filed on 3/15/06 has been fully considered. Upon updated search, the new ground of rejection has been set forth as above.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dalena Tran whose telephone number is 571-272-6968. The examiner can normally be reached on M-F 6:30 AM-4:00 PM), off every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Black can be reached on 571-272-6956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Patent Examiner  
Dalena Tran



May 25, 2006